

## **REMARKS**

Applicants would like to thank Examiner Forman and her supervisor Mr. Gary Jones for the courtesies extended during the interview held at the Patent Office on September 18, 2001. During the interview the pending claims were discussed. Proposed claim amendments to overcome the Monk Reference, as well as the § 112 rejection were discussed.

Claims 21, 33 and 34 have been amended by adding the term "inkjet technique" to further describe the method of shooting an aqueous solution into an oily liquid layer. Support for this claim language can be found throughout the specification, for example on pages 4, 9, and 17 of the specification. Claim 34 has also been amended to include the term "PCR" to describe the type of reaction performed. Support for this claim language can be found throughout the specification, for example on pages 3, and 7-9. Claims 36 and 40 have been deleted. Claims 21-22, 25, 29, 32-34, and 37-39 are pending.

### **Claim Rejections under 35 U.S.C. § 112**

Claim 34-40 are rejected under 35 U.S.C. § 112. The Examiner states that these claims are drawn to a process for conducting a reaction and that the specification does not provide an adequate written description. Nevertheless, the Examiner notes that the specification teaches a process for conducting a PCR reaction.

Claim 34 has been amended to be directed to a PCR reaction. Claims 37-39 depend from claim 34. Claim 36 has been canceled. Applicants, therefore, submit that the claim amendments render this ground of rejection moot. Accordingly, applicants respectfully request withdrawal of this ground of rejection.

### **Claims Rejections under 35 U.S.C. §102**

Claims 21, 22, 25, 26, 29, 34, 36 and 40 are rejected under 35 U.S.C. § 102 (b) as being anticipated by Monk et al. Claims 36 and 40 have been canceled. Claims 21 and 34, as well as claim 33, have been amended to indicate that the shooting of the aqueous solution into the oily liquid layer is by inkjet technique. Claims 22, 25, 29, and 32 depend from claim 21. Claims 37-39 depend from claim 34. Applicants submit that Monk et al. does not teach

shooting by inkjet technique. Rather, in Monk et al. the solutions are delivered by either a syringe or a pulled Pasteur Pipette. Applicants, therefore, respectfully submit that Monk et al. does not anticipate nor render the claims obvious. Accordingly, applicants request withdrawal of this ground of rejection.

#### Conclusion

In view of the foregoing amendments and remarks, it is firmly believed that the subject invention is in condition for allowance, which action is earnestly solicited.

The office is hereby authorized to charge Deposit Account No. 11-0600 with any fees required by this paper or to credit any overpayment.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned directly at 202-220-4258.

Entry of these claim amendments as well as prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

Dated: September 20, 2001



Teresa A. Lavenue  
Registration No. 47,737

KENYON & KENYON  
1500 K Street, N.W., Suite 700  
Washington, D.C. 20005-1247  
(202) 220-4200 (telephone)  
(202) 220-4201 (facsimile)  
(202) 220-4258 (direct)

**MARKED UP VERSION OF AMENDED CLAIMS**

21. (Thrice Amended) A process for reducing evaporation of a minute droplet of an aqueous solution comprising the steps of:  
providing a planar substrate;  
providing an oily liquid layer;  
providing an aqueous solution immiscible with said oily layer; and  
shooting a minute droplet by inkjet technique of said aqueous solution into said oily liquid layer to contact said planar substrate,  
wherein said oily liquid layer surrounds all surfaces of said minute droplet of aqueous solution that are not in contact with said planar substrate whereby evaporation is reduced.
33. (Thrice Amended) A process for reducing evaporation of a minute droplet of an aqueous solution comprising the steps of:  
providing a planar substrate;  
providing an oily liquid layer;  
providing an aqueous solution immiscible with said oily liquid layer;  
shooting a minute droplet by inkjet technique of said aqueous solution into said oily liquid layer to contact said planar substrate, and  
providing a covering in contact with said minute droplet of said aqueous solution,  
wherein said oily liquid layer surrounds all surfaces of said minute droplet of said aqueous solution that are not in contact with said planar substrate and said covering whereby evaporation is reduced.
34. (Four times Amended) A process for conducting a PCR reaction in a minute droplet of an aqueous solution protected from evaporation comprising the steps of:  
providing a planar substrate;  
providing an oily liquid layer;  
providing an aqueous solution immiscible with said oily liquid layer;  
shooting a minute droplet by inkjet technique of said aqueous solution into said oily liquid layer to contact said planar substrate;

providing a covering in contact with said oily liquid layer;

wherein said oily liquid layer surrounds all surfaces of said minute droplet of said aqueous solution that are not in contact with said contact surface of said planar substrate;

providing to said protected minute droplet a reactant; and conducting a reaction in said produced minute droplet with said reactant whereby evaporation is reduced.